



SPI, CMM, SMS Review

- 1. What is Software Process Improvement (SPI)?**
- 2. What is the Capability Maturity Model (CMM)?**
- 3. How many maturity levels are there in the CMM?**
- 4. What KPAs are in level 2?**
- 5. In which KPA does testing reside?**
- 6. What is the System Modification Scenario (SMS)?**
- 7. What are the levels of the SMS?**



Software Quality Assurance Introduction

- 1. What is Software Quality Assurance ?**
- 2. What does the FSO SQA Program provide to its managers?**
- 3. What are some of the constraints outlined in the SQA Policy?**
- 4. What are the goals of SQA ? Where would I find what I need to have to perform SQA activities?**
- 5. Who is responsible for SQA?**
- 6. What are some of the SQA roles?**
- 7. Who is responsible for verifying product compliance within any AIS?**



System Requirements Review (SRR) Task

- 1. Break up into small groups.**
- 2. Draw your assignment from an envelope.**
- 3. Plan an SRR.**
- 4. Conduct an SRR meeting .**



Resource Estimation Review Task

- 1. What is the purpose of the Resource Estimation Review?**
- 2. When is the format of the Resource Estimation Review determined?**
- 3. What aspects of the SCR are reviewed?**
- 4. Is there a report prepared for this review?**
- 5. What happens in the Resource Estimation Review Follow-up?**
- 6. Who in your organization is responsible for doing each subtask in this task?**



Project Software Quality Assurance Plan Modification

Using the SMS, the attached model system and the SQA Plan template, discuss the thirteen basic components of a Software Quality Assurance (SQA) Plan.

Model System



The Asbury Company is a small Welding enterprise. It maintains a payroll file on a mainframe computer. The purpose of the file is to maintain current personnel and payroll information on all 500 of their employees.

The current payroll MASTER file is called PAYDATA. It is a INDEX SEQUENTIAL FLAT file. There are multiple FIXED LENGTH record of 80 CHARACTERS. The records exist in numeric order. The Social Security Number is the INDEX KEY.

The PERSREC is the 01 record and it contains the employee personal data. Currently it has seven fields. The order of the fields and the data class is as follows: Record Number = 2 NUMERIC CHARACTERS, Social Security Number = 9 NUMERIC CHARACTERS, Name = 20 ALPHANUMERIC CHARACTERS; Address = 20 ALPHANUMERIC CHARACTERS; City = 16 ALPHANUMERIC CHARACTERS; State = 2 ALPHABETIC CHARACTERS; and Zip = 5 NUMERIC CHARACTERS. There are SPACES = 6 ALPHANUMERIC CHARACTERS at the end.

The PAYREC is the 02 record and it contains payroll data. Currently it has 5 fields. The order of the fields and the data class is as follows: Record Number = 2 NUMERIC CHARACTERS; Social Security Number = 9 NUMERIC CHARACTERS; Name = 20 ALPHANUMERIC CHARACTERS; Gross Pay = 12 NUMERIC CHARACTERS; and Net Pay = 12 NUMERIC CHARACTERS. There are SPACES = 25 ALPHANUMERIC CHARACTERS at the end.

The master file update is executed on daily, weekly and monthly cycles. Input can be received interactively or batched.



**ADD SQA PLAN TEMPLATE (12 PAGES)
HERE**



Project SQA Plan Modification Task

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Using SCR X0102-00 and the SMS, identify appropriate modifications to the project's SQA plan.



Defense Finance and Accounting Service System Change Request				
1. DFAS SCR# X0102-00	2. SCR# X0102-00	3. FROM:		
4. SCR Title: VACATION EARNED	5. Total System Changes: 1	6. System: PAYROLL & ACCOUNTING 7. Subsystem: PAYREC RECORD	8. Category: SECRET	9. Date Received: 10 MAY 1995
10. Point of Contact: DEBBIE SMITH		11. Phone: (317) 543-1234	12. Office Code: DFAS-	
<p>13. DESCRIPTION: Allow each employee the capability to look at their own PAYREC data. This involves adding a password on their personal computer. This data should be made available using the Local Area Network (LAN) System. This information will be available to look at only. No changes will be allowed by the individual employee. Any errors will need to be corrected by the payroll personnel.</p>				
<p>14. RECOMMENDED SOLUTION: Using the employee's network ID and a password of their own choosing, the system will automatically show the employee's valid PAYREC data menu. Select the menu desired. The information then will display on the screen and be available for screen printing. Cumulate the fields, by pay periods. Add a field to the PAYREC record to show the actual number of days worked. GUI application has to be designed. The system will be available for use on the LAN and a menu designed</p>				
<p>15. REQUESTER BENEFITS: All employees will have available their PAYREC data to better schedule their vacation leave and adjust their work schedules accordingly.</p>				
<p>16. FUNCTIONAL / TECHNICAL ANALYSIS: Use the next six available characters at the end of the PAYREC (02) record, for the number of days worked.</p>				
<p>17. COST / BENEFIT ANALYSIS: By allowing each employee to have access, it will save the office money and time. Instead of printing the reports each pay period. The employee can print or see their report at a time convenient for him/her. It may not be necessary for an employee to see his/her report every pay period.</p>				
18. Required by Date:	19. Work	20. CDA:	21. DPI:	



SQA Release Plans Certification Task

- 1. What area of the SCMP does the SQA evaluate?**
- 2. What area of the SQAP does the SQA evaluate?**
- 3. When will the SDP and all supporting plans be certified as accurate?**
- 4. Who evaluates the modified SDP for accuracy and completeness?**
- 5. After discrepancies or deficiencies are noted to whom is the plan forwarded for correction?**



Critical Design Review (CDR) Task

- 1. What are the four subtasks in the CDR task?**
- 2. Who notifies the participants of the time and location of the CDR?**
- 3. Who provides the system overview of the SCR(s) under consideration?**

What is the team looking for during the CDR?

What is the team reviewing during the CDR?

- 4. What information is included in the CDR Summary Report?**
- 5. Who logs all action items from the Summary Report and ensures all items are traced to closure?**



Software Integration Test Readiness Review Task

- 1. What information is contained in the review folder?**
- 2. Who in your organization presents the Test Plan, the Requirements Traceability Matrix, and any other items according to the established agenda?**
- 3. What products are created in the SIT Readiness Review?**
- 4. What is the purpose of the SIT Readiness Review?**
- 5. Who reviews the test scripts for compliance to the Requirements Testing Traceability Matrix?**
- 6. What is the purpose of the SIT Certification Task?**



Post Implementation Review Task

- 1. What is the purpose of a PIR?**
- 2. When is a PIR executed?**
- 3. Who in your organization is responsible for performing the work in this task?**
- 4. Where are lessons learned noted?**



SQA Process Review Subphase

- 1. What are the objectives of an SQA Process Review?**
- 2. What Tasks are part of every Process Review?**
- 3. What makes each Process Review unique? What are some occasions when a Process Review is recommended?**
- 4. What is a Process Compliance checklist? How do you tailor one to fit the process being reviewed?**
- 5. What Subtasks are part of the Execution task?**
- 6. What are the outputs from the Follow-up task?**